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Marketing Implications of Traditional and ICT-Mediated Leisure Activities

Abstract

This study investigates the role of traditional and information and communication technology (ICT)-mediated leisure activities in consumer behaviour. An online survey of 558 members and 1,319 ex-members of an Australian DVD rental company gathered preferences for nine traditional leisure activities and seven ICT-mediated leisure activities. The results of a cluster analysis showed four clusters with significant cluster differences across leisure activities as well as across demographics and consumer behaviours. For practitioners, the study illustrates how profiling customers on their leisure preferences can increase advertising effectiveness, reflect loyalty and help predict customer lifetime value. For academia, the results reveal how another consumer dimension, leisure activities, relates to demographic and behavioural characteristics.

Keywords: ICT, consumer behaviour, preferences, leisure

1. Introduction

Traditional leisure activities such as reading, gardening and travel have entertained society for millennia. Furthermore, technologies – Gutenberg's printing press in the 1400s, movies in the early 1900s, radio, TV, the Internet and other Information and Communication Technologies (ICTs) – alter how people spend their leisure time. Yet to the authors' knowledge, few studies have investigated how traditional and ICT-mediated leisure relate to each other and to consumer behaviour. For example, advertisers could target consumers interested in travelling if these same consumers had a high interest in cinema. Tourism destinations could show travel spots in the cinema and movies could advertise on travel websites. Firms could improve their marketing by segmenting customers on leisure activities and linking these segments to demographic and behavioural variables.

For example, significant differences in customer lifetime value (CLV) across customer segments could help predict which customers, prospective and existing, would become valuable customers. CLV, the discounted difference between a customer's lifetime revenue and expenses, helps firms allocate resources to acquire valuable prospects and retain valuable customers (Cao & Gruca, 2005; Lewis, 2006). Furthermore as products and processes become standardised, a customer-centric approach gives companies a competitive advantage (Jain & Singh, 2002).

As CLV forms through customer consumption behaviours and perceptions (Bolton, Lemon, & Verhoef, 2004), investigating how leisure activities relate to consumer behaviour could help practitioners increase advertising effectiveness and influence customer lifetime value. For example, firms could increase CLV by examining leisure activities of valuable customers and then target prospective customers with similar leisure activities.

For academia, relationships among CLV, leisure activities and demographics should highlight another aspect of consumer behaviour, the importance of leisure activities. Research suggests distinct user profiles relate to leisure use of the Internet in general (Bellman, Lohse, & Johnson, 1999; Fallows, 2006; Mokhtarian, Salomon, & Handy, 2006), as well as on the burgeoning phenomenon of social networking sites such as Facebook and MySpace (Hargittai, 2007). Thus, this study investigates how clusters based on leisure activities – traditional and ICT-mediated – relate to consumer demographics and CLV.

2. Literature Review

2.1 The importance of CLV

CLV is the net profit or loss from a customer during a relationship with the firm (Berger & Nasr, 1998; Jain & Singh, 2002). Some authors adjust this CLV, positively or negatively, for customer word of mouth about the firm (Bayon, Gutsche, & Bauer, 2002). At an aggregate level, a firm's customer equity is the sum of all customers' CLV (Blattberg & Deighton, 1996).

Research provides multiple models to calculate CLV, albeit with limitations. Most models are deterministic, require sufficient data and omit competition or company marketing activities (Villanueva & Hanssens, 2007). Furthermore most models ignore the importance of the acquisition stage in the customer life cycle. Or in the retention stage, models may ignore customer behaviour such as usage (Bolton, Lemon, & Verhoef, 2004; Thomas, 2001).

Neglecting customer behaviour in the retention stage could lead to false CLV estimates. For example, declining use could indicate little interest in the relationship. In the acquisition stage, high costs such as discounts could reduce an individual's CLV, as it takes time to reach the break-even point for new customers. Furthermore, customers acquired with discounts could have no interest to pay full price and quit when faced with the full price.

To identify and manage high CLV customers, a model should overcome these limitations. In acquiring customers, firms should predict a prospect's potential CLV. This prediction helps firms allocate resources to valuable prospects and avoid 'switchers', customers that switch from competitor to competitor in response to attractive offers (Kamakura, Wedel, Rosa, & Mazzon, 2003). ICT leisure preferences could help predict customer CLV in both the acquisition and retention stages.

2.2 ICTs and consumer lifestyles

Information and communication technologies such as the Internet and mobile phones influence many aspects of today's lifestyles. These technologies affect leisure activities – social and recreational – by replacing traditional activities such as playing board games, writing letters or watching television. ICTs generate new leisure activities, reallocate time to other leisure activities and facilitate existing leisure activities (Mokhtarian, Salomon, & Handy, 2006). In addition, the importance of ICT-mediated leisure grows in parallel with the growth of leisure time. As the standard of living rises, people tend to have more leisure time due to retiring earlier and working part-time (European Conference of Ministers of Transport, 1998). Demand for leisure activities, and the role of ICT-mediated leisure, increase as economic prosperity rises (Mokhtarian, Salomon, & Handy, 2006).

Complementing ICTs' influence on leisure, ICTs influence and create new media. Most new media do not arise spontaneously or independently, or succeed overnight. New media emerge from and coexist with old media, usually for decades (Fidler, 1997). Consequently, old media change or even disappear in response to a new medium. For example, radio survived after television arrived, transforming itself from a mass- to a niche-medium (Fidler, 1997). Apple's new iPhone may transform existing technologies such as mp3 players, mobile phones and hand-held computers, as well as how consumers interact with traditional media such as radio and TV.

A recent media and leisure adaptation, and the context for this paper, is online DVD rental companies such as Netflix (netflix.com) in the USA and Quickflix (quickflix.com.au) in Australia. These companies use a sophisticated website to manage member movie requests and use surface mail to deliver DVDs. Members subscribe to one of several monthly plans and unlike renting DVDs from bricks and mortar stores, members pay no late-fees. The evolution of watching movies − from movie theatres to drive-in movies, to television broadcasts, to video recording, to cable television, to DVD rental, to online DVD rental, to online downloads, to the future − exemplifies the need to review motivations for leisure activities.

2.3 Motivation to engage in leisure activities

In their literature review, Manfredo et al. (1996) describe research streams examining consumer engagement in leisure activities. Building on motivation theory, some authors argue that consumers engage in leisure activities to attain a specific physical or psychological goal. For example, one swims to keep fit, look sporty or increase self-esteem. Building on this framework, other authors focus on the leisure experience as a psychological outcome. People consume leisure for experiential aspects, for example they go on holiday to experience foreign cultures. Leisure research also focuses on expectancy-valence motivation concepts; behaviour is a function of ability and motivation.

Ryan and Gledon (1998) in their literature review note the Beard and Ragheb Leisure Motivation Scale that defines four motives as determinants of satisfaction gained from leisure activities. The first motivation is intellectual stimulation, for example learning or discovering new things such as new cultures. Secondly, the scale builds on social reasons such as to build or strengthen relations. Thirdly, consumers engage in leisure to compete and challenge themselves. Finally, a stimulus avoidance component assesses the drive to escape from overly stimulating life situations. These four motivation components could influence the choice and use of new media.

2.4 Evolving media use and consumer characteristics

Demographic and psychographic characteristics relate to using new media, for work and for play. For example people use the web at work and at home to seek product information, and they buy online for convenience and to save time (Bellman, Lohse, & Johnson, 1999; Fallows, 2006). They also use the web for fun. Almost one in three Internet users, mainly young males, regularly goes online for leisure (Fallows, 2006). Whereas about half of Australian Internet users go online for work or education, 98 percent of Australian Internet users have personal and private reasons to surf the web, such as e-mail and online shopping (Pink, 2008). Of all online activities, leisurely surfing the web ranks fourth, behind e-mail, using search-engines and reading news (Fallows, 2006). The Internet offers information, communication and leisure (Flanagin & Metzger, 2001) and today, half of the time consumers spend with media is spent on the Internet (IDC, 2008).

Furthermore media facilitate social interaction. Within a household, families view and discuss content, or play computer games together (Mandryk, Inkpen, & Calvert, 2006; Morrison & Krugman, 2001). Outside the home, interactions with external partners mainly take place through the Internet, such as e-mail or online gaming (Morrison & Krugman, 2001).

Another ICT-mediated leisure activity increasing in popularity, particularly with youth, is playing video games on consoles such as the Sony PSP or Nintendo DS (GfK Gruppe, 2006b). For now, the popular Apple iPod is mainly for leisurely listening to music; just 12% of the respondents in an August 2006 survey watched videos on mobile devices or downloaded podcasts (Madden, 2006). Yet as with other new media (Fidler, 1997), the iPod's popularity may increase markedly, other media may change in response to the iPod and the iPod may evolve.

Movies and books illustrate the evolution of technology and leisure, and demographic relationships with the evolution. A study of cinema consumers found moviegoers were young and education related positively to the preference for cinema, whereas family responsibilities related negatively with this preference (Fernández Blanco, Prieto-Rodríguez, & Orea-Sánchez, 2004). TV and video were no substitute for cinema fans, but seemed a good alternative for non-enthusiasts. Similarly, a leading global market research company, GfK Gruppe, found audio books do not replace printed books, but rather act as an additional medium for book consumers (GfK Gruppe, 2007). Reading traditional printed books was a favourite leisure activity for old age groups, but young consumers tended to favour ICT-mediated leisure. Youth downloaded music and videos to their PCs and mobile phones (GfK Gruppe, 2006a).

As media become entertainment oriented, usage patterns change. Some users prefer advanced media technologies, such as enhanced programming options, to traditional media. Using these advanced media technologies with the appropriate hardware, for example large flat-screen TVs, results in high consumption because of high enjoyment (Morrison & Krugman, 2001). Other consumers substitute traditional media with new media, for example reading newspapers on the web (Morrison & Krugman, 2001).

In general, youth prefer ICT media, while adults favour traditional media. Youth tend to prefer activities with their peers, particularly hedonic ones such as shopping and using mobile phones (Aoki & Downes, 2003; Lachane, Beaudoin, & Robitaille, 2003). Moreover, compared with elderly consumers, youth are susceptible to peer pressure (Nelson & Mcleod, 2005; Park & Lennon, 2006). As the movie example shows, enthusiasts prefer a particular medium – the cinema. The average consumer, however, uses several media and may ignore the advantages of a particular medium. Different patterns of leisure consumption, such as average versus enthusiastic users, may relate to customer satisfaction and loyalty with a particular medium.

2.5 Strategies across the customer lifecycle

To investigate relationships among customer behaviour and CLV, companies consider three strategies – acquisition, retention and re-acquisition – across the customer life cycle, from first contact until a customer quits the relationship. For example, customer acquisition relates to customer retention (Blattberg, Thomas, & Getz, 2001; Thomas, 2001). Promotionally acquired customers driven by special offers may have low interest in long-term relationships with the company (Lewis, 2006; Scott, 1976). The five customer life cycle stages shown in Figure 1 – Prospects, First-time Buyers, Early Repeat Buyers, Core Customers, and Defectors (Blattberg, Thomas, & Getz, 2001) – help determine acquisition, retention and re-acquisition strategies to manage customer lifetime value (Reinartz & Kumar, 2000).

-- Fig. 1 here --

Figure 1: Customer Life Cycle Stages and Strategy Phases
(adapted from Blattberg et al. 2001)

3. Methodology

To investigate how leisure activities relate to managing customer lifetime value, this paper uses data from an Australian Internet DVD rental company. The company invited members and ex-members to participate in an online study in exchange for free cinema tickets. Due to an overwhelming response and a finite number of free tickets, the company shut down the survey – shown in Annex 1 – within a day. Eliminating five outliers and ten cases with missing data yielded 1,877 cases – 558 members and 1,319 ex-members – for analysis. The sample characteristics in Annex 2 show majority were young families less than 39 years of age with at least one person full-time employed and an annual household income above the median Australian household income of 53,404 A$ (Australian Bureau of Statistics, 2006, 2007).

The company used focus group interviews with current and ex-customers to select possible leisure activities for investigation and develop the questionnaire. As a result of these interviews questions covered different examples of leisure activities, demographics and satisfaction variables as well as 12 items' importance in the three customer lifecycle strategies – acquisition, retention and defection. The company's database yielded four measures of actual behaviour: membership status, membership length, DVDs sent, and movie reviews posted to the website. The latter two measures were averaged based on membership length. As the company used free 30-day memberships as a promotional tool, classifying respondents with memberships under 31 days as *trialers* and memberships over 60 days as *members*, gave an additional behavioural variable. In line with studies of subscription markets, membership length served as a proxy for CLV (Bhattacharya, 1998; Fader, Hardie, & Jerath, 2007; Reinartz & Kumar, 2000).

Concerning customers with membership lengths from 31 to 60 days, some trialers never become customers even when the product is a good value and a good fit. Factors such as habit, inertia, nostalgia and forgetfulness might impede the conversion from trialer to member (Nash, 1993). Some customers convert after a free trial but quit soon afterwards because of unresolved uncertainty or other reasons (Lewis, 2006). These *wobblers* – customers with a membership between trialers and members – might resemble first-time buyers in non-subscription or repertoire markets (Blattberg, Thomas, & Getz, 2001; Sharp, Wright, & Goodhardt, 2002). Although the company had only a few wobblers (N=103), these wobblers might differ from trialers and members.

A cluster analysis defines segments with elements as similar as possible within clusters and differences across clusters as high as possible. These clusters of homogeneous customer groups help understand consumer behaviour (Punj & Stewart, 1983). Using Ward´s method in a hierarchical cluster analysis separated respondents on 16 leisure activities such as DVD watching, Internet use and traditional leisure activities including gardening and travel (see Table 1 later). Comparing the distance coefficients in the cluster merging process (Hair, Black, Babin, Anderson, & Tatham, 2005) , a four-cluster solution produced the best result.

The stability of a cluster solution is vulnerable to sequence effects, the order in which two pairs with the same distance value link in a cluster (Van der Kloot, Spaans, & Heiser, 2005). PermuCluster, an add-on procedure of the statistical software SPSS, checked the stability of the solution and showed high stability as all permutations showed the same quality (Normalized SSDif=4950.653). Furthermore, dividing the sample into a validation and cross-validation sample, confirmed the stability of the cluster solution (χ^2 = 2,221, df=3, p=.528). Additionally, a discriminant analysis showed clear discriminations amongst the four clusters (Wilks' λ=.112, p<.001) with 95.6% of the original grouped cases correctly classified.

Based on their focus group results, the DVD rental company developed the nine items measuring customer satisfaction. Exploratory factor analyses using principle component analysis with Varimax rotation extracted three factors (Eigenvalues >= 1) from the nine variables. The first factor with three items represented satisfaction with DVD delivery. Four items reflecting satisfaction with customer service, website ease of use, and range of DVD made up the second factor. Finally, a two-item factor of value and price made up the third factor. Based on Hair et al.'s (2005) guidelines, the Kaiser-Meyer-Olkin Measure of Sampling Adequacy and Bartlett's Test of Sphericity statistics indicated that the extraction and loading of three factors were successful. Annex 3 shows the results of the exploratory factor analyses.

Following the exploratory factor analyses, subjecting the three extracted factors to confirmatory factor analyses yielded the results in Annex 4. As Annex 4 shows, all three factors indicate satisfactory reliability, with Cronbach's alpha > .7 (Hair, Black, Babin, Anderson, & Tatham, 2005). Following Fornell and Larcker's (1981) procedure, discriminant validity was assessed by comparing the variance extracted estimates of a pair of constructs with the square of the correlation between the constructs, and repeating the test for all construct-pairs. As the variance extracted estimates exceeded the correlations for all pairs of factor, the three factors possessed discriminant validity. Finally, structural equation modelling produced satisfactory fits for the three-factor measurement model (AGFI=.916; CFI=.945; RMR=.043; normed $\chi 2$ = 15.888, df=24)

4. Results

4.1 Significant cluster differences

The χ^2 values of Kruskal-Wallis tests for ordinal variables and cross-tabulations for nominal variables highlighted significant cluster differences. As Tables 1 and 2 show, the clusters differed significantly on 15 of the 16 leisure variables used for clustering. Except for wobbler membership, the four clusters differed significantly on all demographics, actual DVD behaviours, satisfaction factors and items deemed important to acquisition, retention and defection. The use of survival analysis, which works well with right-censored data (Hair, Black, Babin, Anderson, & Tatham, 2005), calculated the median membership length of each cluster. Comparing the survival curves of the four clusters yielded a Wilcoxon (Gehan) statistic (df=3) of 26.338 ($p<.001$), showing significant differences in membership length among the clusters.

Table 1: Cluster Profiles

	Traditional Families (N=400)	**Screen-thusiasts (N=377)**	**Poor Youngsters (N=494)**	**Retirees (N=606)**	**Sign. level**
ICT-Mediated Leisure					
Broadband access	*48%*	**63%**	58%	61%	.001
Internet skills	**Highest**			*Lowest*	.001
Internet use		**Highest**		*Lowest*	.001
DVD watching		**Most**		*Least*	<.001
Watch DVDs	Weekend Evenings	Weekday evenings	Anytime	Anytime	<.001
Video store visits		**Most**		*Least*	<.001
Cable TV	*26%*	**33%**	**33%**	**32%**	.029
Traditional Leisure					
Cinema	**83%**	**83%**	**84%**	*75%*	<.001
Travel	**66%**	*57%*	*57%*	63%	.005
Literature	**53%**	*41%*	44%	48%	.003
Sport	*32%*	35%	**41%**	38%	.046
Health and fitness	**45%**	*26%*	39%	35%	.001
Dining out	**57%**	*40%*	44%	42%	.001
Museums	**25%**	*18%*	20%	21%	*.117*
Food and wine	**47%**	*32%*	37%	40%	.001
Gardening	23%	*20%*	*19%*	**30%**	.001
DVD Behaviour and Demographics					
Trialers	**52%**	49%	*39%*	48%	<.001
Members	*42%*	47%	**56%**	46%	<.001
Wobblers	**6%**	*4%*	**6%**	**6%**	.491
Membership days	*35*	43	**101**	38	<.001
DVDs received per week	1.7	**1.9**	*1.6*	1.7	<.001
Ratings posted per week	.15	.19	*.12*	**.20**	.031
Family status	Family with children	Respondent and partner	Respondent and adults	Respondent and partner	.001
Income	**Highest**		*Lowest*		.001
Age group			*Lowest*	**Highest**	.001
FT employment	**61%**	**62%**	*55%*	*55%*	.001
Satisfaction Factors and Intention to Recommend					
DVD delivery	.083	*-.268*	***.127***	.008	<.001

Customer service	.033	*-.165*	***.138***	-.031	<.001
Value	.021	*-.196*	***.12***	.011	<.001
Intention to recommend	2.67	*2.29*	**2.81**	2.46	<.001

Bold signifies a cluster leader, *Italics* a cluster laggard

Another clear separation of clusters was the role of importance variables across the three customer lifecycle strategies – acquisition, retention and defection (see Table 2). All 12 reported importance variables showed significant differences across clusters.

Table 2: Cluster Profiles – importance of acquisition, retention and defection variables

	Traditional Families (N=400)	Screenthusiasts (N=377)	Poor Youngsters (N=494)	Retirees (N=606)	Sign. level
Acquisition					
Value for money	*26%*	30%	**36%**	29%	.005
Free trial	**75%**	66%	*61%*	70%	<.001
Get wanted titles	*19%*	25%	**27%**	24%	.038
Discounts	8%	**10%**	6%	*5%*	.016
Find/add titles to queue	20%	*12%*	17%	**21%**	.003
Find rare titles	24%	**30%**	23%	*21%*	.014
Retention					
Home delivery	52%	*51%*	61%	**71%**	.004
Rare titles	27%	**40%**	31%	*20%*	.008
Defection					
Watch few videos	50%	*27%*	34%	**52%**	<.001
Watch videos faster than delivered	17%	**36%**	23%	*11%*	<.001
Priority titles	27%	**39%**	*23%*	28%	<.001
Too long to receive DVDs	32%	**52%**	38%	*30%*	<.001

Bold signifies a cluster leader, *Italics* a cluster laggard

4.2 Cluster Profiles

Traditional Families had the most families of all clusters. This cluster had the highest Internet skills but the lowest percentage of broadband access. In another paradox, Traditional Families had the highest income but the lowest cable TV access and lowest median membership length. This cluster seemed to have the income but little interest in paying for TV or renting movies. Traditional leisure activities help explain this seemingly time-starved cluster, which usually watched DVDs on weekend evenings. Traditional families had the highest or second highest interest of the clusters on all but one of the nine traditional leisure activities, sport. As well, this cluster had the highest percentage of trialers of the DVD service. Free trials were a major incentive for subscribing. Other reasons to join such as the value for money and getting wanted titles were low for this cluster. In line with the time-starved theme, watching videos faster than delivered had minimal importance with defections.

Screenthusiasts watched DVDs – particularly on weekday evenings – the most often of all clusters, visited video stores most often, had high cinema and cable TV interests, and the highest Internet use of all clusters. Apart from the cinema, their interests in traditional leisure activities were low. Their leisure interests stood out as passive, indoors, and parked in front of a screen – cinema, TV or computer. Mostly couples with average income, this cluster had the most full time employment.

The Screenthusiasts were the most demanding cluster, with the lowest satisfaction and intention to recommend of all clusters. Discounts and finding rare titles, two more reflections of a demanding nature, drove their acquisition. Convenience, such as adding titles to the queue in the acquisition phase or home delivery in the retention phase, seemed a low priority for Screenthusiasts. Unlike the Traditional Families, this cluster may have ample free time due to the low importance of convenience and that they watched DVDs on weekday evenings. Their demanding nature also surfaced in the retention phase with the importance of rare titles, and in the defection phase with DVDs taking too long to arrive and not being their priority titles. Although they received the most DVDs on average, they seemed not to get enough out of the service and quit.

Poor Youngsters stood out as the youngest, poorest, least employed, and highest percentage of students and respondents sharing flats. A physically active cluster, they had the highest interest in cinema and sport, and the second highest interest in dining out, and health and fitness. Despite average DVD watching, this cluster had the most members of the DVD service and almost triple the other clusters' membership length. Yet on average, this cluster watched the least number of DVDs and posted the least movie ratings.

In line with their high membership, the Poor Youngsters had the highest satisfaction and intention to recommend of all clusters. Value and finding wanted titles drove their acquisition.

Once acquired, this group seemed to have few reasons to leave and showed the lowest importance of getting priority titles leading to defection.

The oldest cluster, *Retirees* had the least interest in many ICT-mediated leisure activities – watching DVDs, Internet skills, using the Internet, and visiting DVD stores. Yet this ostensibly Luddite group, perhaps due to free time, posted the most movie ratings. Their traditional leisure activities were mostly above average, except for gardening where they had the highest percentage of all clusters. Convenience was important to Retirees, adding titles to the queue in the acquisition phase and home delivery in the retention phase. Discounts and finding rare titles were unimportant reasons to join or stay. Of all clusters, Retirees left because they used the service too little and perhaps related to free time, not because the DVDs took too long to arrive.

Subsequent post-hoc tests revealed significant differences between clusters on 30 to 38 out of 42 variables. Whereas Traditional families and Poor Youngsters differed in 30 variables, Screenthusiasts and Poor Youngster differed in 38 variables. Although variables showed significant differences across groups, these post-hoc tests also suggested similarities between clusters.

With ICT-mediated leisure variables, the Internet skills of Traditional Families and Screenthusiasts, as well as Screenthusiasts and Poor Youngsters were similar, but Traditional Families and Poor Youngsters differed significantly in their Internet skills. In traditional leisure activities, Traditional Families shared similar literature and dining out preferences with all clusters. The three other clusters, however, differed significantly in their preferences for literature and dining out. Overall Traditional Families and Screenthusiasts showed similar leisure preferences.

Traditional Families and Screenthusiasts, and Poor Youngsters and Retirees had similar incomes. Three behaviour variables − membership length, DVDs received and ratings posted − and satisfaction variables showed similarities in one to six of seven variables among the clusters. Whereas Screenthusiasts and Poor Youngsters showed a similarity only with ratings posted, Traditional Families shared six similarities with Poor Youngsters and also with Retirees.

Cluster similarities also existed in the reasons to stay or quit. Traditional Families and Screenthusiasts had similarities in their importance of home delivery as a reason to stay. Traditional Families and Retirees had a similar importance in a reason to quit – watching few videos.

5. Discussion and Conclusions

5.1 Academic Implications

The study introduces ICT-mediated leisure and shows how leisure activities, traditional and ICT-mediated, relate to consumer behaviour and to distinct customer profiles. Although clustered on just leisure activities, the four clusters showed significant profile differences based on demographics, psychographics, membership and satisfaction with a DVD online rental company, and important items across the customer life cycle. Similar to studies showing an inverse relationship with age and ICT-mediated leisure, apart from posting movie reviews, *Retirees* had the least interest in ICT-mediated leisure.

Research suggests that media generations coexist (Fidler, 1997). Similarly, in this study all clusters watched movies four different ways – cable TV, cinema, online DVD rental and traditional DVD rental. Consumers may seek other benefits of watching movies such as the cinema's social aspects, enhanced viewing on a big screen and new release movies. For *Screenthusiasts*, the most demanding of all clusters, getting a priority DVD title and getting it immediately from a physical store were important.

The study confirms a non-linear relationship between satisfaction and loyalty (Bolton, Lemon, & Verhoef, 2004). Whereas the membership length of Screenthusiasts was the second highest, their membership was the lowest of all clusters. Although Traditional Families had the shortest membership length, their satisfaction was average. Yet Traditional Families had the highest income, which could mislead predictions of prospects' CLV. As the Poor Youngster and Traditional Family clusters suggest, household income had a negative relationship with CLV. Other predictors of CLV could be family status, interest in traditional leisure activities and free time.

This study also confirmed the low value of promotionally acquired prospects (Thomas, 2001). Free trials drove Traditional Families in the acquisition phase, and this cluster had the highest presence of trialers. Discounts drove Screenthusiasts and their membership length paled in comparison with the Poor Youngsters. Furthermore, free trials had the least importance to join for the cluster with the most members, Poor Youngsters.

5.2 Applied Implications

Dozens of significant differences across clusters underscore the importance of leisure activities in consumer behaviour. Profiling each cluster helps the Australian online DVD company craft strategies for each phase in the customer life cycle. Furthermore, the results partially generalise to the Australian online DVD rental market, as two companies control online DVD rentals in Australia.

Traditional Families had a wide spectrum of leisure activities and the highest interest in six of nine traditional activities, which might have attenuated their demand for ICT-mediated leisure. DVD watching was one of their many interests, perhaps to entertain the kids. This cluster had the lowest use of three costly ICT leisure activities – online DVD rentals, broadband Internet access and cable TV. Time with traditional leisure activities and family, rather than income, helps explain their behaviour; Traditional Families had the highest income.

Time constraints also help explain why Traditional Families had the most trialers. After the trial period, they may have realised they used the service too little and quit. Free trials were the highest incentive for this cluster, yet their membership was the lowest of all clusters. Traditional families may have been unsure from the beginning and added online DVD rentals to an already full plate of leisure activities.

A better acquisition method for Traditional Families than a free trial could be an online demonstration that illustrates what this cluster would get from the service. This could be a win-win situation for customers and firm. The customers would reduce their learning time to find if such a service met their expectations. Firms could reduce their acquisition costs and reallocate resources to valuable prospects, increasing the future CLV.

Based on the similarities of Traditional Families and the cluster with the longest average membership and therefore the highest CLV – Poor Youngsters – firms could possibly increase the retention rate and CLV of Traditional families. In addressing this cluster's major reason for defection – watching few videos – firms could offer plans for a few videos per month or a plan with variable costs dependent on use and increase this cluster's retention rate and CLV. Another possibility to increase customer retention is changing the DVD catalogue according to customer preferences as some customer might watch more videos if their preferences were met. However as this cluster had the largest variety of leisure preferences, but no clear reason to quit, it would be difficult for the company to change their DVD catalogue accordingly.

Unlike Traditional Families, *Screenthusiasts* focused on ICT-mediated leisure such as DVD watching, and frequented video stores the most often. Passive indoor activities in front of a screen seem ingrained in their lifestyle. The most demanding cluster, their satisfaction was the lowest of all clusters. Rare titles and discounts drove their acquisition and retention; waiting for DVDs and not getting the titles they wanted led to their defection.

Looking at acquisition and retention, Screenthusiasts expected more from the DVD rental service. Thus, a DVD rental company should try to change this group's perceptions in the acquisition phase and focus on the rare titles in the retention phase, an important incentive for them. Another idea is a loyalty program with discounts after a certain membership length; a strong reason for Screenthusiasts to join was the discount. As Screenthusiasts had the highest Internet use, a movie related social community on the company's website could keep Screenthusiasts as members; their mental switching costs should increase because of social bonds with other members.

Compared with the previous two clusters, the *Poor Youngsters'* high membership and membership length might be that DVD, Cable TV and videos were inexpensive leisure activities compared to activities such as travel, and food and wine. Perhaps the cluster's high percentage of sharing flats made watching DVDs and cable TV popular activities. As noted earlier, peer pressure influences youth's leisure choices. The high membership and membership length in this cluster might be due to peer influence. As their membership, satisfaction and intention to recommend were highest, this cluster should spread word-of-mouth and recommend the service to friends, perhaps in part because humans are social animals (Fidler, 1997)

No particular defection reason stood out for the Poor Youngsters. However as this cluster had the second highest percentage of defections due to delivery time, firms might increase the retention rate of Poor Youngsters by improving the delivery time. Another possibility for the company to reduce churn of Poor Youngsters is to offer more sport DVDs, as Poor Youngsters had the highest interest in sport.

A trend across the clusters – as interest in traditional leisure activities increased, interests in ICT-mediated activities decreased – fit the *Retirees*. They had low interest in ICT leisure, preferring traditional leisure such as gardening, travel and literature. Offering retirees a plan that fits their low use could increase their median membership length. Possibly retirees had only a low consumption because the DVD range did not match their preferences. Increasing the variety of traditional leisure DVDs could increase retirees' interest in the service.

6. Limitations and Future Research

A limitation of this study, and a fruitful area for future research, is the limited list of ICT-mediated technologies. The online DVD company omitted mobile phones and game consoles, two popular leisure activities for youth (GfK Gruppe, 2006a, 2006b). Youth spend time with online gaming (Fallows, 2006) and in online social networks such as Facebook or MySpace (Hargittai, 2007). Apart from youth, some online social networks interest other age groups or lifestyles such as LinkedIn (linkedin.com) for professionals and Realbuzz (realbuzz.com) for fitness enthusiasts. Finally, the survey omitted traditional leisure activities, such as photography, pets and dancing. Adding ICT-mediated and traditional leisure activities would enhance future research of leisure activities and consumer behaviour.

Another limitation of this study was sampling within a day. Relative to the two other clusters, retirees and poor youngsters had less fulltime employment. Perhaps more retirees or poor youngsters had time to answer questions in this one day than traditional families or screenthusiasts. Furthermore psychographic characteristics might influence the willingness to participate in a survey. Customers with a higher satisfaction level might be more inclined to answer questions. To avoid possible bias, studies should compare the number of survey respondents in each cluster with the related population. Future research could use data of other leisure related industries, such as travel companies, hotels or sport clubs to investigate generalisability of this study's findings.

This study showed how leisure activity profiles – traditional and ICT-mediated – related to demographics and online DVD rentals. Future research could investigate relationships among traditional leisure activities and ICT-mediated leisure activities as leisure time increases (Blanchard, 2004). As there is a finite amount of leisure time, people with broad leisure interests might budget their time and reduce the time spent on ICT leisure. In addition some traditional leisure activities are expensive, such as sports requiring equipment or membership fees. Future studies could investigate relationships of these two variables, time and costs, with traditional and ICT-mediated leisure activities.

All clusters used the online video rental service and visited the video store. Some video rentals could be impulsive, such as new film releases. As the online services and Apple Computers are testing online delivery of DVDs (Markoff, 2007), downloading DVDs may shift consumers away from video stores and towards online services. Investigating the perceived advantages of online and offline stores for the same product could shed light on the evolution of ICT-mediated leisure.

All clusters had a medium or low interest in several media generations, DVDs, cable TV and cinema. One reason, and a future research area, could be what other benefits consumers seek from leisure activities, such as the social aspect of a cinema visit and meeting friends. Future research should investigate how social influence relates to traditional and ICT-mediated leisure. For instance, do Screenthusiasts go to the cinema and watch DVDs to socialise with friends rather than, or in addition to, their interest in movies? Likewise, research shows that youth often succumb to peer pressure when purchasing (Lachane, Beaudoin, & Robitaille, 2003; Moschis & Moore, 1979). To what extent does social pressure influence youth or other age groups to participate in traditional and ICT-mediated leisure activities?

Finally, this study argues that leisure patterns could help predict the CLV of a prospect. Future studies should continue this research stream on the importance of leisure variables across the customer life cycle. For instance, do certain leisure activities of customers with a high CLV indicate a high future CLV of prospects with a similar pattern?

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Annex 1 Survey Questionnaire

Quickflix survey

How do you connect to the Internet?
□ broadband □dialup

How comfortable are you using the Internet?
□ very high □ high □ medium □ low □ very low

How often do you use the Internet?
□ <1h p.w. □ 1-2h p.w. □ 2-3h p.w. □ >3h p.w.

How often do you watch DVDs?
□ daily □ most days □ weekly □ every two weeks □ monthly

When do you watch DVDs?
□ Weekdays evenings □ Weekdays days □ Weekend evenings □ Weekend days
□ no particular time

How often do you visit the video store?
□ twice a week □ once a week □ > once a month □ once a month □ very rarely □ never

Do you subscribe to PayTV?
□ no □ yes □ yes plus movies

Which of the following areas are you interested in?
□ Cinema
□ Travel
□ Literature
□ Sport
□ Health and fitness
□ Dining out
□ Museums
□ Food and wine
□ Gardening

Which of the statements describes the household you are living in? (Family status)
□ by yourself □ you+other adults □ you and your partner □ family with kids < 5 years old
□ family with kids < 9 years old □ family with kids < 15 years old □ family with kids > 16 years old

Which of the following describes your household income?
□ < 20,000$ □ 20,000-40,000$ □ 40,000-60,000$ □ 60,000-80,000$
□ 80,000-100,000$ □ 100,000-120,000$ □ 120,000-140,000$ □ 120,000-140,000$
□ 140,000-160,000$ □ > 120,000-140,000$

Which of the following describes your age profile?
□ 18-24 □ 25-29 □ 30-34 □ 35-39 □ 40-44 □ 45-49 □ 50-54 □ 55-59 □ 60-64 □ 65-69 □ 70+

Your employment
□ full-time □ part-time □ full-time homemaker □ unemployed □ student □ retired

How satisfied are you with the following aspects of the Quickflix services

	Highly satisfied				Highly dissatisfied
Delivery against expectations	□	□	□	□	□
Delivery turnaround	□	□	□	□	□

Sending your priorities	□	□	□	□	□
Overall service quality	□	□	□	□	□
Customer service team	□	□	□	□	□
Website ease of use	□	□	□	□	□
Price	□	□	□	□	□
Value received	□	□	□	□	□
Range of DVDs	□	□	□	□	□

How likely are you to recommend Quickflix to your friends or colleagues

Highly likely				Highly unlikely
□	□	□	□	□

What were your 3 most important factors in choosing to start a Quickflix membership?
□ Value for money
□ Free trial
□ Get wanted titles
□ Discounts
□ Find/add titles to queue
□ Find rare titles

What were your most important factors in choosing to stay with Quickflix?
□ Home delivery
□ Rare titles

What are the main reasons for considering cancelling your Quickflix subscription?
□ Watch few videos
□ Watch videos faster than delivered
□ Priority titles
□ Too long to receive DVDs

Annex 2 Sample Demographics

		Sample Size (N= 1,877)
Employment	Full time (34+ hours)	1,079 (57.5%)
	Part time (15-34 hours)	260 (13.9%)
	Part time (< 15 hours)	104 (5.5%)
	FT homemaker	106 (8.5%)
	Unemployed	33 (1.8%)
	Student	165 (8.8%)
	Retired	76 (4.0%)
Age group	18-24	246 (13.1%)
	25-29	305 (16.2%)
	30-34	361 (19.2%)
	35-39	296 (15.8%)
	40-44	250 (13.3%)
	45-49	176 (9.4%)
	50-54	104 (5.5%)
	55-59	62 (3.3%)
	60-64	39 (2.1%)
	65-70	20 (1.1%)
	> 70	18 (1.0%)
Annual Household Income	< 20,000$	185 (9.9%)
	20,000-60,000$	698 (37.2%)
	60,000-100,000$	614 (22.7%)
	100,000-140,000$	213 (11.3%)
	>140,000$	167 (8.9%)
Living with ...	By yourself	156 (8.3%)
	You+other adult	291 (15.5%)
	You+your partner	387 (20.6%)
	Family with children < 5 years	240 (12.8%)
	Family with children < 9 years	215 (11.5%)
	Family with children < 15 years	242 (12.9%)
	Family with children > 15 years	347 (18.5%)
Household size	1	150 (8.0%)
	2	523 (27.9%)
	3	430 (22.9%)
	4	469 (25.0%)
	5	215 (11.5%)
	6	90 (4.8%)

Annex 3 Results of Exploratory Factor Analyses

Factor	Item	Factor 1	Factor 2	Factor 3	Eigen Value	Factor Loadings
1. Satisfaction with Delivery	Satisfied with delivering against expectations	.771	.272	.194	4.633	.834
	Satisfied with delivery turn around	.796	.159	.203		.854
	Satisfied with sending your priorities	.797	.120	.110		.8
2. Satisfaction with Customer Service	Satisfied with overall service quality	.500	.574	.116	1.311	.74
	Satisfied with customer service team	.282	.640	.281		.773
	Satisfied with website ease of use	.123	.784	.167		.794
	Satisfied with range of DVDs	.125	.838	.121		.812
3. Satisfaction with Value	Satisfied with price	.140	.156	.900	1.012	.918
	Satisfied with value received	.285	.287	.810		.904
Bartlett's Test of Sphericity		$\chi 2 = 6553$, $df = 36$, $p < .001$				
KMO Measure		$p = .854$				

Annex 4 Results of Confirmatory Factor Analyses

Factor	Cronbach's Alpha	Variance Extracted Estimates	Pearson's correlation (all $p < .001$)		
			Factor 1	Factor 2	Factor 3
1. Satisfaction with Delivery	.771	.688	-	.562	.466
2. Satisfaction with Customer Service	.786	.609	.562	-	.497
3. Satisfaction with Value	.796	.83	.466	.497	-